

### **Abstract of the Disclosure**

An image is taken of a knee or other region of interest. The cartilage is extracted from the image and is subdivided into load-bearing and non-load-bearing regions. A biomarker is calculated for each of the load-bearing and non-load-bearing regions. The 5 biomarkers can be assessed over time. The biomarkers for the load-bearing and non-load-bearing regions, and their changes, are used to assess the progress of joint disease.